REMARKS

Claims 1-3, 5-7, 10-20, 22-26, 29-37, and 39-43 are pending in the present application. Reconsideration of the claims is respectfully requested.

I.   Telephone Interview with Examiner Nguyen on August 26, 2005

Applicant thanks Examiner Cindy Nguyen for the courtesy extended to applicant's representative during the August 26, 2005 telephone interview. During the telephone interview, the Examiner and applicant's representative discussed the cited prior art references. The Examiner appeared to indicate that the cited prior art contained in the Final Office Action did not teach or suggest all claim limitations recited in independent claim 1. Therefore, it is applicant's representative's understanding that barring additional materially relevant prior art being found in an updated search by the Examiner, the present claims are in condition for allowance. The substance of the interview is summarized in the remarks below.

II.   35 U.S.C. § 103, Obviousness, Claims 1-3, 5-7, 10-20, 22-26, 29-37, and 39-43

The Examiner has rejected claims 1-3, 5-7, 10-20, 22-26, 29-37, and 39-43 under 35 U.S.C. § 103 as being unpatentable over Rao et al., U.S. Patent No. 5,657,450 ("Rao") in view of Ording, U.S. Patent No. 2001/0055017 ("Ording") and in further view of Ramot et al., U.S. Patent No. 5,815,566 ("Ramot"). This rejection is respectfully traversed.

The Examiner bears the burden of establishing a *prima facie* case of obviousness based on the prior art when rejecting claims under 35 U.S.C. § 103. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). For an invention to be prima facie obvious, the prior art must teach or suggest all claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). The Examiner has not met this burden because all of the features of these claims are not found in the cited references as believed by the Examiner. Therefore, a combination of Rao, Ording, and Ramot would not reach the presently claimed invention recited in the claims.

Independent claim 1 of the present invention, which is representative of independent claims 19, 25, 36, 42, and 43, with regard to similarly recited subject matter, reads as follows:

1.   A method of generating an estimate of an amount of time required to complete a content request for content to be transmitted over a network, comprising:

receiving a first estimate of an amount of time to retrieve or prepare requested content in a content source device, wherein the first estimate includes a minimum, maximum, and average amount of time to retrieve or prepare the requested content;

generating a second estimate of an amount of time to receive the requested content over a communication link from the content source device;

generating a third estimate of a total amount of time to complete the content request based on the first and second time estimates, wherein the third estimate includes a minimum, maximum, and average time of completion for the content request;

generating a graphical representation of the third estimate, wherein the graphical representation includes an indicator for each of the minimum, maximum, and average time of completion for the content request; and

outputting the graphical representation on a display device.

With regard to claim 1, the Examiner stated:

Regarding claims 1, 25 and 42, Rao discloses: a method, a computer program product and an apparatus for generating an estimate of an amount of time required to complete a content request for content to be transmitted over a network, comprising: receiving a first estimate of an amount of time to retrieve or prepare requested content in a content source device (col. 7, lines 29-39, Rao);

generating a second estimate of an amount of time to receive the requested content over a communication link (105, 104, fig. 1) from the content source device (col. 8, lines 16-32, Rao); generating a third estimate of a total amount of time to complete the content request based on the first and second time estimates (col. 7, lines 55-67, Rao). However, **Rao didn't disclose: generating a graphical representation of the third estimate; and outputting the graphical representation on a display device.** On the other hand, Ording discloses: generating a graphical representation of the third estimate (fig. 2, Ording); and outputting the graphical representation on a display device (fig. 2, Ording). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include the display the output in the graphical representation device in the system of Rao as taught by Ording. The

motivation being to enable the system provides updates on the progress of the task the percentage which is completed and/or estimated time remaining in the progress bar (page 3, paragraph 0022, Ording).

However, Rao/Ording didn't discloses: wherein the first and the third estimate includes a minimum, maximum and average amount of time to retrieve or prepare the requested content and generating a graphical representation of the time estimate, wherein the graphical presentation includes an indicator for each of the minimum, maximum and average time of completion for the content request. On the other hand, Ramot discloses: wherein the first and the third estimate includes a minimum, maximum and average amount of time to retrieve or prepare the requested content estimate (col. 7, lines 45 to col. 8, lines 8, and col. 8, lines 27 to col. 10, lines 31, Ramot) wherein the graphical presentation includes an indicator for each of the minimum, maximum and average time of completion for the content request (col. 7, lines 45 to col. 8, lines 8, and col. 8, lines 27 to col. 10, lines 31, Ramot). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include the estimate includes a minimum, maximum and average amount of time to retrieve or prepare the requested content estimate in the combination system of Rao/Ording as taught by Ramot. The motivation being to enable the system provides method for estimate the maximum, maximum, and average time to complete waiting and transfer object between client and server. [Emphasis added.]

Final Office Action, dated July 28, 2005, Pages 2-4.

Rao teaches a method and apparatus for providing time estimates and progress feedback on long-running distal information source access operations. Rao, Abstract. Rao teaches that two time estimates are provided with the generated estimation data; one is an estimate of when a "first result" would be returned and the other is an estimate of the completion of the entire operation. Rao, Col. 7, lines 55-58. Generally, the estimated time it will take for an information source to return a response that may be provided to a client is the "first response" estimate. The completion time estimate is generally the time it takes for the "last" result to be returned. Rao, Col. 8, lines 16-20. In addition, Rao teaches that if there is no history for a particular sub-operation at a particular time, a default value, e.g., 4 seconds, can be used. Other techniques for providing a default value, e.g., an average of all operations with an information source, could also be utilized. Rao, Col. 8, lines 39-43.

In contrast, independent claim 1 of the present invention recites that the first estimate of an amount of time to retrieve the requested content from a source device includes a minimum, maximum, and average amount of time for retrieval of the requested content. Moreover, claim 1 recites that the third estimate of a total amount of time to complete the content request based on a first and second time estimates includes a minimum, maximum, and average time of completion. Furthermore, the minimum, maximum, and average estimated times of completion for the content request is graphically represented on a display device as further recited in claim 1 of the current invention.

Even though Rao teaches an average first response estimate as an alternative default value if there is no history for a particular sub-operation at a particular time (Rao, Col. 8, lines 39-43), Rao does not teach or suggest identifying a minimum and maximum amount of time to retrieve the requested content from a source device as recited in claim 1. Additionally, Rao does not teach or suggest generating and displaying a minimum, maximum, and average time of completion for a content request as further recited in claim 1. Rao neither makes reference to a minimum and maximum time estimate to retrieve the requested content, nor to a minimum, maximum, and average amount of time for completion of the content request. In addition, applicant agrees with the Examiner that Rao does not disclose generating a graphical representation of the third estimate and outputting the graphical representation on a display device. Office Action, Pages 2 and 3. As a result, Rao does not teach or suggest all claim limitations recited in independent claim 1.

With regard to Ording, Ording teaches a user interface that provides continuous feedback regarding a function or task being performed by a computer's operating system. This feedback is provided by means of an interface element that changes size and/or shape as portions of the task are completed, such as a progress bar. Ording, Page 1, paragraph 0007. When a task is initiated, such as a copying or downloading operation, two threads are launched. One thread performs the actual copying operation itself, and provides updates on the progress of the task, e.g. the percentage that is completed and/or the estimated time remaining. The second thread controls the display of the status indicator, and receives the updates from the first thread to change the length of the

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progress bar accordingly. Ording. Page 3, paragraph 0022. Therefore, Ording teaches that the status dialogue window displays to the user the various indicators of the progress of the task being performed, such as the number of files remaining to be operated on, the time remaining, and the percentage of the task completed. Ording. paragraph 0027.

In contrast, claim 1 recites a method for generating and graphically representing a third estimate of the total amount of time needed to complete a content request by combining a first estimate of the amount of time required for the source device to retrieve or prepare the requested content with a second estimate of the amount of time necessary to receive the requested content from the source device over a communication link. Even though Ording teaches a progress bar that depicts the estimated time required to receive a content request from a source device over a network, Ording makes no reference to including in its time estimate an estimated time for the source device to retrieve or prepare the requested content for transmission as is recited in claim 1. The graphically depicted time estimate in Ording is only analogous to the second time estimate recited in claim 1, which is the amount of time necessary for a client device to receive a content request over a network. Ording does not account for the retrieval or preparation time of the requested content by the source device as recited in claim 1.

Moreover, claim 1 recites a method for generating and graphically representing a third estimate, which includes a minimum, maximum, and average time of completion for a content request. In other words, claim 1 recites a method that utilizes three graphical representations of a minimum, maximum, and average time for completion. In contrast, Ording teaches a method that uses only one progress bar or graphical representation of a time for completion. Ording, Figure 2. Therefore, Ording does not teach or suggest generating and graphically representing a third estimate, which includes a minimum, maximum, and average time of completion for a content request as recited in claim 1.

Furthermore, Ording is an example of a problem the applicant is trying to correct with embodiments of the present invention. Because Ording merely teaches the graphical representation of an estimated time required to receive a content request from a source device, the method of Ording is less accurate than the present invention recited in claim 1, which not only estimates the time required to receive a content request from a source device but also estimates the time required to retrieve or prepare the content

request for transmission. By way of example, current progress bars do not account for backend processing and preparation of the data to be downloaded. As a result, known progress bars are less accurate and provide a false indication to the user of the estimated time of completion of the content request. Application, Page 2, lines 6-11. The system taught by Ording does not account for backend processing and preparation of the data to be downloaded. Hence, Ording teaches a system that the applicant is endeavoring to improve with embodiments of the present invention.

Additionally, even if Rao and Ording could be properly combined, the combination of the two references would not form the presently claimed invention. Rao teaches two time estimates are provided with the generated estimation data; one is an estimate of when a "first result" would be returned and the other is an estimate of the completion of the entire operation. Rao, Col. 7, lines 55-58. Ording teaches a single graphical representation of an operating system's task performance and the progress of the task's completion. Ording, Page 1, paragraph 0007 and Figure 2. Consequently, the combination of Rao and Ording will produce a single graphical display of an estimate of when a "first result" would be returned and when the entire operation would be completed.

However, the present invention recited in claim 1 displays a graphical representation of a minimum, maximum, and average total amount of time to complete the content request based on the first and second time estimates. Further, the applicant agrees with the Examiner that Rao and Ording do not teach or suggest that the first and the third estimate includes a minimum, maximum, and average amount of time to retrieve or prepare the requested content and generating a graphical representation of the time estimate, wherein the graphical presentation includes an indicator for each of the minimum, maximum, and average time of completion for the content request as recited in claim 1. Therefore, the combination of Rao and Ording does not teach or suggest all limitations recited in claim 1 of the current invention.

Ramot does not cure the deficiencies of Rao and Ording. Ramot teaches a method in a dynamic call management system for use in an inbound/outbound predictive dialing telemarketing environment. Ramot, column 1, lines 18-20. Predictive dialing is a technique for scheduling the dialing of calls to provide an answered call almost

immediately after an agent becomes available from servicing a previous call. Ramot, column 1, lines 23-25. The system taught by Ramot employs a scheduling method to keep the number of called parties waiting in a queue for an agent at any given time at a maximum. Ramot, column 8, lines 28-30. The maximum queue length is set to the average of the minimum and maximum queue waiting times. Ramot, column 10, lines 1 and 2.

Even though Ramot teaches a minimum, maximum, and average queue waiting time estimate for called parties, Ramot does not teach or suggest generating a third estimate of a total amount of time to complete the content request based on the first and second time estimates, wherein the third estimate includes a minimum, maximum, and average time of completion for the content request as recited in claim 1. Ramot makes no reference to generating a third estimate of a total amount of time, which includes a minimum, maximum, and average, based on a first and a second time estimate, wherein the first estimate also includes a minimum, maximum and average amount of time as recited in claim 1. Consequently, Ramot does not teach or suggest this recited claim 1 limitation.

In addition, Ramot does not teach or suggest generating a graphical representation of the third estimate, wherein the graphical representation includes an indicator for each of the minimum, maximum, and average time of completion for the content request and outputting the graphical representation on a display device as further recited in claim 1. Ramot teaches that the agent's workstation displays basic called party information, input fields into which an agent may enter responses to questions, a monthly calendar, and a listing of available time slots. Ramot, column 5, line 41 – column 7, line 17. Ramot makes no reference to graphically representing and displaying the minimum, maximum, and average queue waiting time estimates to the agent.

Ramot teaches that a processor in a server calculates the minimum, maximum, and average queue waiting time in order to determine how many telephone calls the server can make at any one time during the telemarketing campaign to allow an agent to "focus attention more productively on conversing with customers and recording data." Ramot, column 2, lines 48-67. In other words, the server determines the minimum, maximum, and average queue waiting time estimates in order to manage the predictive

dialing system taught by Ramot so that the agent can concentrate on speaking with customers. Thus, the minimum, maximum, and average queue waiting time estimates are never graphically represented and displayed on an agent's screen because the agent is not concerned with how many callers are in the waiting queue. In Ramot, the agent is only concerned with receiving telephone calls and entering data. As a result, Ramot does not teach or suggest the recited claim 1 feature of generating a graphical representation of the third estimate, wherein the graphical representation includes an indicator for each of the minimum, maximum, and average time of completion for the content request and outputting the graphical representation on a display device either.

Because Rao, Ording, and Ramot do not teach or suggest that the first and the third estimate includes a minimum, maximum and average amount of time to retrieve or prepare the requested content and generating a graphical representation of the time estimate, wherein the graphical presentation includes an indicator for each of the minimum, maximum and average time of completion for the content request as recited in claim 1, the combination of Rao, Ording, and Ramot cannot teach or suggest these recited claim 1 limitations. Accordingly, the rejection of independent claims 1, 19, 25, 36, 42, and 43 as being unpatentable over Rao in view of Ording and in further view of Ramot has been overcome.

In view of the arguments above, independent claims 1, 19, 25, 36, 42, and 43 are in condition for allowance. As a result, claims 2-18, 20-24, 26-35, and 37-41 are dependent claims depending on independent claims 1, 19, 25, and 36, respectively. Consequently, claims 2-18, 20-24, 26-35, and 37-41 also are allowable, at least by virtue of their dependence on allowable claims. Furthermore, these dependent claims also contain additional features not taught by the Rao, Ording, and Ramot references.

For example, dependent method claim 10 of the present invention, which is representative of dependent computer program product claim 29, reads as follows:

> 10.   The method of claim 1, wherein the graphical representation includes associated text, and wherein the associated text is changed from a first text to a second text when the requested content begins to be received from the content source device.

With regard to claim 10, the Examiner stated:

Regarding claims 10 and 29, all the limitations of these claims have been noted in the rejection of claims 1 and 25 above, respectively. In addition, Rao/Ording/Ramot discloses: wherein the graphical representation includes associated text (items remaining to be copied in figure 2, Ording), and wherein the associated text is changed from a first text to a second text when the requested content begins to be received from the content source device (time remaining : about 5 second, fig. 2, Ording).

Final Office Action, Pages 5 and 6.

Ording is a method and system whereby a user interface provides continuous feedback to a user regarding progress toward completion of a task being monitored in a status dialogue window. The progress is indicated by a graphic element such as a progress bar, whose size is increased to fill a space of predetermined area by an amount corresponding to the percentage of the task completed. Ording, Abstract. In addition, Ording teaches that the number of files remaining to be operated on by the current task and the approximate amount of time remaining is indicated. Ording, Page 3, paragraph 0025 and Figure 2. As Figure 2 in Ording plainly illustrates, the text of "Items remaining to be copied:" and "Time remaining:" always stays the same in the status dialogue window. Only the numerical values for the remaining time and items to be copied are changed in the graphical display of Ording.

In contrast, the present invention recites in claim 10 that the graphical representation includes associated text, and wherein the associated text is changed from a first text to a second text when the requested content begins to be received from the content source device. In other words, the text or wording contained within the graphical representation of the third estimate, which includes the first estimate of an amount of time to retrieve or prepare requested content in a source device and a second time estimate of an amount of time to receive the requested content over a communication link from the content source device, is changed when the content commences to be received by the client device. By way of example, a textual message indicating the current operations being performed, such as "preparing requested content" or "downloading content," may be displayed along with the progress bar to inform the user of the current operations being performed. This textual message may change, for example, from "Retrieving/Preparing Requested Content" to "Downloading Content" when the first data

packet containing the requested content is received by the client device. Application, Page 20, line 31 - Page 21, line 7 and Figures 10 and 11.

Ording does not teach or suggest that the graphical display includes associated text that changes from a first text to a second text when the requested content is received as recited in claim 10. Therefore, Ording does not teach or suggest textual changes to the graphical display when different operations are being performed as recited in claim 10 but merely numeric changes related to the performance of a task. As a result, Ording does not teach or suggest the features recited in dependent claim 10, which is representative of dependent claim 29.

Accordingly, the rejection of claims 1-3, 5-7, 10-20, 22-26, 29-37, and 39-43 as being unpatentable over Rao in view of Ording and in further view of Ramot has been overcome.
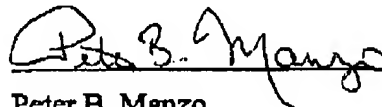
III.   Conclusion

It is respectfully urged that the subject application is patentable over the cited prior art references and is now in condition for allowance.

The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,

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